

WHAT IS CLAIMED IS:

1. An oscillator comprising:  
a resonant circuit generating a resonant signal;  
5 a drive circuit that feeds back the resonant  
signal to the resonant circuit; and  
an output terminal connected to a given node of  
the resonant circuit, an oscillation signal of the  
oscillator being output via the output terminal.  
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2. The oscillator as claimed in claim 1,  
wherein:  
the resonant circuit includes an inductor; and  
the output terminal is connected to one end of  
15 the inductor.
3. The oscillator as claimed in claim 1,  
wherein:  
the resonant circuit includes an inductor; and  
20 the output terminal is connected to an  
intermediate node of the inductor located between two  
ends of the inductor.
4. The oscillator as claimed in claim 1,  
25 further comprising a matching circuit including a  
capacitor connected to the resonant circuit via the  
output terminal of the oscillator.
5. The oscillator as claimed in claim 1,  
30 further comprising:  
a matching circuit including a capacitor  
connected to the resonant circuit via the output  
terminal of the oscillator; and  
a substrate on which the resonant circuit and the  
35 drive circuit are formed,  
the capacitor of the matching circuit including a  
conductive pattern provided to the substrate.

6. The oscillator as claimed in claim 1,  
further comprising:

5 a matching circuit including a capacitor  
connected to the resonant circuit via the output  
terminal of the oscillator; and

a substrate on which the resonant circuit and the  
drive circuit are formed,

10 the capacitor of the matching circuit including  
conductive patterns that are provided to the substrate  
and face each other.

7. The oscillator as claimed in claim 1,  
wherein:

15 the resonant circuit includes an inductor; and  
the drive circuit comprises a transistor having a  
base that receives the resonant signal, a collector  
receiving a power supply voltage, and an emitter  
connected to the inductor of the resonant circuit.

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8. The oscillator as claimed in claim 1,  
wherein:

the resonant circuit includes an inductor;  
the drive circuit comprises a transistor having a  
25 base that receives the resonant signal, a collector  
receiving a power supply voltage, and an emitter  
coupled to the inductor of the resonant circuit via an  
emitter bias resistor.

30. 9. The oscillator as claimed in claim 1,  
wherein:

the resonant circuit includes an inductor;  
the drive circuit comprises a transistor having a  
base that receives the resonant signal, a collector  
35 receiving a power supply voltage, and an emitter  
coupled to the inductor of the resonant circuit; and  
the oscillator further comprises a matching

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circuit having a capacitor coupled to the emitter of the drive circuit.

10. The oscillator as claimed in claim 1,  
5 wherein:

the resonant circuit includes an inductor;  
the drive circuit comprises a transistor having a  
base that receives the resonant signal, a collector  
receiving a power supply voltage, and an emitter  
10 coupled to the inductor of the resonant circuit; and  
the oscillator further comprises a matching  
circuit having a capacitor coupled to the inductor via  
the output terminal.

15 11. The oscillator as claimed in claim 1,  
wherein the resonant circuit includes an inductor  
formed by a transmission line.

20 12. The oscillator as claimed in claim 1,  
wherein the resonant circuit includes an inductor  
formed by a micro stripline.

25 13. The oscillator as claimed in claim 1,  
wherein the resonant circuit includes a variable  
capacitance diode that receives a control signal via a  
control terminal of the oscillator, so that an  
oscillation frequency can be adjusted externally.